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ABSTRACT

This study examined the effectiveness of audiocuing as a method for training a student teacher in the skill of providing positive reinforcement to students. (Audiocuing is the pre-recorded auditory cue provided by a microcassette recording which only the subject can hear.) In the event that it is necessary for the student teacher to make behavioral changes in the amount of positive feedback statements provided to the student, auditory cuing would prompt the intern into making a positive statement. Eventually, this prompt would be removed, but the habit of providing consistent feedback responses would remain. This research was designed to substantiate evidence that audio prompting would induce more specific verbal feedback, which in turn would increase academic learning time (ALT). The subject for the study was a student teacher assigned to a high school physical education class. Results indicate that audiocuing did have an effect on variable feedback, but produced a statistically insignificant increase in the amounts of engaged motor and ALT. (JD)

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A Cooperating Teacher's Intervention Strategy On A Student Teacher

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Introduction

The supervision of student teachers has become an important focal point for educators during the last few years due to the increasing emphasis being placed on education in public schools. In addition, the importance of becoming an effective teacher by way of efficient management skills is well documented. (Brophy, 1983). It is this fact that makes it necessary to understand that although efficient management skills are vital to effective teaching, not all teachers initially have those skills. It is important to note, however, that management skills are skills which can be learned.

Evertson et. al. (1981) have shown the necessity of using positive reinforcement when teaching students rules, regulations, and procedures at the beginning of the school term. According to Glynn and Thomas (1974) and Van Houten and Sullivan (1975), as cited by van der Mars (1987) this positive reinforcement will have a direct relationship to decreased levels of off-task behavior, increased on-task behaviors, and improved academic performance by the student.

As has been noted in previous research (van der Mars, 1987), audiocuing is a useful method for "...training a preservice teacher to react positively to students' managerial and transitional responses" and "...as a practical means of changing teacher behavior."

Education and the preparation to enter into the field of education should not be taken lightly. The student teaching experience is probably the most important aspect of this educational process. Steps should be taken to see that each student who enters the educational field be given every opportunity to succeed. The primary goal of the cooperating teacher should be to consistently provide the student teacher with pertinent information regarding his/her performance. Siedentop (1981) said, "Changes are not difficult to achieve once the intern understands what is expected, but the intern must receive regular accurate feedback about how he/she is doing."

In the event that it is necessary for the student teacher to make behavioral changes in regard to the amounts of positive feedback statements provided to the student, audiocuing would be a very useful tool. The auditory cuing would prompt the intern into making a positive statement. Ultimately and ideally, this prompt would be removed, but the habit for providing consistent feedback responses would remain. The following research was designed to substantiate evidence that audio prompting would and could induce more specific verbal feedback which in turn would increase engaged motor and ALT.

The purpose of this research is two-fold: (1) to assess the effect of audiocuing on the teacher process skill of feedback and (2) to ascertain if the improvement of a teacher process skill has an effect on criterion process variables. This investigation was based on the hypothesis that through the use of audiocuing, a student teacher's verbal feedback behavior can be altered in such a way that academic performance will be significantly increased.

The basic assumption is that audiocuing is an effective tool for initiating behavioral changes in regard to amounts of positive feedback provided to the student.

For the purpose of clarification, Acacemic Learning Time (ALT), audiocuing, intervention and engaged motor will be defined. ALT is defined as an observational instrument which encompasses the setting or learning environment set by the teacher, the content of the instruction, the responses of the learner and the difficulty of the responses during activity. Audiocuing is the pre-recorded auditory cue provided through the use of a microcassette recorder which only the subject can hear. Intervention is the use of audiocuing as a means of increasing the amounts of feedback provided by the student teacher. Engaged motor is the involvement of individual students doing motor tasks.

Methods

Subject and Setting

The subject of the research was a female student from Southwest Texas State University who was assigned to a High School for her student teaching experience. She was a degree candidate for May of 1988. The student had no previous experience with systematic observations, nor had anyone attempted to intervene regarding the feedback she provided during her Methods of Teaching Physical Education class taken during teacher preparation.

The high school students randomly selected to participate in the investigation were males and females registered in the 2nd and 6th period physical education classes. All of the students were between the ages of 14 and 18. Class sizes were 34 and 29 per class.

The student teaching experience lasted twelve weeks. The student teacher was required to wear a microcassette recorder for cuing during the second period class. This class will herein be referred to as the experimental group. The sixth period class was the control group. Consequently, there was no intervention taking place during 6th period. Each class was involved in the same activity unit, Flag Football.

Target Behavior and Intervention

The process variable targeted for change was the student teacher's need of verbal positive reinforcement. Audiocuing was the method of intervention implemented. The subject wore a microcassette tape recorder held in an inconspicuous place, usually in the pocket or strapped to the waist. An earphone was connected to the recorder, allowing only the subject to hear the cues. The cues were auditory beeps occurring every thirty seconds. The subject had been previously instructed to provide the student or class with either specific or general positive feedback.

Observations and Data Collection

The student teacher was coded for a total of eleven days. The first four days aided in establishing a baseline. The next five days were used as an intervention phase for the experimental group. Seven days following the intervention, a two day post check was performed in order to determine maintenance.

Each of the lessons taught by the student teacher was coded for amounts of management, instruction, activity, motor engagement, ALT, and feedback. For the purpose of this investigation, however, we were only interested in the engaged motor, ALT, and feedback. Each class was evaluated through the use of the ALT-PE interval recording system (Siedentop, Tousignant & Parker, 1982) and the behavioral observational technique of event recording (Siedentop, 1983).

Research Design

A multiple baseline research design across behaviors (Hall, 1971; Hersen and Barlow, 1976) was used to observe the effectiveness of each intervention. This particular design was used in order to provide the subject with visual evidence (in the form of a graph) showing the occurrence of particular behaviors. Each subject is evaluated individually and is able to visually observe the amounts of change occurring directly due to intervention.

Reliability

Interobserver agreement was checked twice during the intervention phase and once during the maintenance phase. Through the use of a videotape, the other coder - a Southwest Texas State University graduate student trained in the ALT interval system - was able to provide an overall reliability quotient of .84.

Analysis

A multiple baseline across classes with a concurrent baseline for engaged motor and ALT was used. This allowed for a mean and visual analysis of graphs. The line of least fit (Parsenson & Baer, 1978) was used as a more stringent analysis of the data. This analysis illustrates trends of the data during the subsequent phases of the study.

Results

Baseline was established during the first four days of teaching. The student teacher's rates of feedback during baseline were as follows; the experimental group showed a baseline mean of 26.8 total feedbacks while the control group had a baseline mean of 25 total feedbacks. During the intervention phase - audiocuing - the teacher provided a mean of 74.6 verbal feedbacks for the experimental group and 35.2 for the control

group.

Engaged motor for the experimental group showed a mean of 11:28 minutes during the baseline phase and 20:20 minutes during the intervention phase. For the control group, the mean was 12:13 during baseline and 15:16 during intervention.

Academic learning time means during baseline for the control group were 2:55 minutes and 4:17 minutes following intervention. For the experimental group, the baseline mean was 3:02 minutes and the mean following intervention was 7:02.
See Table 1.

The post check showed that maintenance, one week following intervention had remained consistent with the mean in all targeted areas of both the control group and the experimental group. In the experimental group, the post check mean for ALT was 7:48 minutes, the engaged motor mean was 16:41 and the feedback response mean was 62.5. Post checks for the control group included 4:11 minutes for ALT, 15:41 minutes for engaged motor and 63 feedback responses. From baseline to post check the control group showed a 152 percent increase in verbal feedbacks, a 28 percent increase in engaged motor and a 43 percent increase in ALT. Within the same time frame, the experimental group displayed a 133 increase in verbal feedback, a 45 percent increase in engaged motor and a 157 pecent increase in ALT.
See Table 2.

After the completion of the line of best fit analysis (Parsenson & Baer, 1978) the following results were found; the experimental group illustrated a stable baseline for feedback but during the intervention phase an ascending trend line. The control group, having no intervention of feedback illustrated a very slight ascending trend line during both phases of the study. The increase in feedback had no apparent effect on the percentages of engaged motor and ALT during the intervention for the study since both trend lines are either stable or slightly ascending. The control group's class in which no audiocuing took place illustrated very slight ascending trends in both engaged motor and ALT. Figure 1 illustrates the data graphically and trend lines during phases of the study.
See Figure 1.

Conclusions/Recommendations

The results indicate that the variable feedback was changed as a direct result of the intervention - audiocuing did have an effect. Although the graph showed a visual increase in the amounts of engaged motor and ALT, the change was not enough to be noted statistically. Due to the intervention, some slight changes in the control group were expected and received. However, in contrast to the experimental group, there was not a drastic increase. This fact serves to illustrate the strength of the intervention.

This study could be repeated using an Experimental Teaching Unit in addition to the involvement of more subjects. This would provide validation for the completed research.

Teachers, student or master, wanting to initiate changes in

their own behavior, without outside help, would easily be able to do so using an audiocuing device of their own making. It is this fact that will allow audiocuing to become adaptable for any situation and thus provide teachers with increased opportunities for self-assessment.

TABLE OF MEANS

	Feedback	Engaged Motor	ALT
Control Group	25	12:13	2:55
Experimental Group	26.8	11:28	3:02

Phase I - Baseline

	Feedback	Engaged Motor	ALT
Control Group	35.2	15:16	4:17
Experimental Group	74.6	20:20	7:02

Phase II - Intervention

	Feedback	Engaged Motor	ALT
Control Group	63	15:41	4:11
Experimental Group	62.5	16:41	7:48

Phase III - Post Check

Table 1

Table of Percentages

Control Group

	Baseline Conditions	Post Check
Feedback	25	+ 152 %
Engaged Motor	12:13	+ 28 %
ALT	2:55	+ 43 %

Experimental Group

	Baseline	Intervention	Post Check
Feedback	26.8	+ 178 %	+ 133 %
Engaged Motor	11.28	+ 77 %	+ 45 %
ALT	3:02	+ 132 %	+ 157 %

Table 2

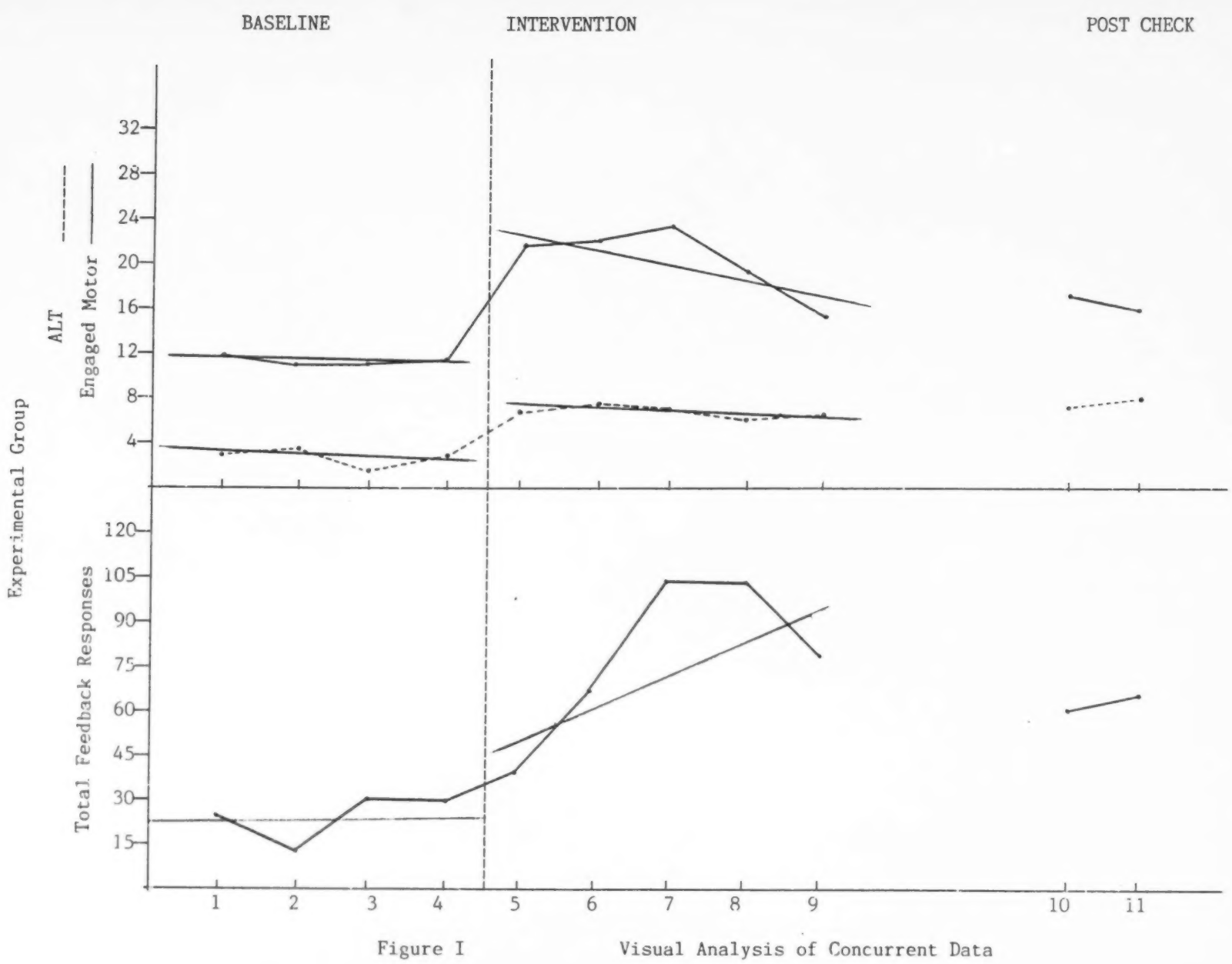

Figure I Visual Analysis of Concurrent Data

REFERENCES

Brophy, J.E. (1981). "Teacher praise: A functional analysis." Review of Educational Research, 51, 5-32.

Evertson, C.M., Emmer, E.T. and Williams, E. (1981). "Organization of behavioral performances." (Report No. 6060). R&D Center for Teacher Education, The University of Texas at Austin. (Eric Document Reproduction Service No. ED 178 541)

Parsonson, B. and Baer, D. (1978). "The analysis and presentation of graphic data." In T. Kratschwill (Ed.). Single Subject Research. New York: Academic Press.

Siedentop, D. (1981). "The Ohio State University supervision research program summary report." Journal of Teaching in Physical Education Introductory Issue), 30-38.

Siedentop, D., Tousignant, M., and Parker, M. (1982). Academic learning time - physical educational revised coding manual. Unpublished manuscript. The Ohio State University.

Siedentop, D. (1983). Developing teaching skills in physical education. Palo Alto, CA: Mayfield.

Van der Mars, H. (1987). "Effects of audiocuing on teacher verbal praise of students' managerial and transitional task performance." Journal of Teaching in Physical Education, 6, 157-165.